Claims

What is claimed is:

1. An apparatus for facilitating speaker identification, said apparatus comprising:

an arrangement for accepting input speech;

5   an arrangement for generating at least one N-best list based on the input speech;

an arrangement for positing a system output based on the input speech; and

an arrangement for ascertaining, via at least one property of the N-best list, whether the posited system output is inconclusive.

2. The apparatus according to Claim 1, wherein said ascertaining arrangement is
10   adapted to ascertain, via at least one statistical property of the at least one N-best list, whether the posited system output is inconclusive.

3. The apparatus according to Claim 2, wherein said ascertaining arrangement is adapted to generate at least two statistical models of the at least one N-best list in ascertaining whether the posited system output is inconclusive.

4. The apparatus according to Claim 3, wherein said ascertaining arrangement is adapted to combine results from the at least two statistical models to yield a confidence measure in ascertaining whether the posited system output is inconclusive.

5. The apparatus according to Claim 4, wherein said ascertaining arrangement is adapted to compare the confidence measure to a threshold value to determine whether the posited system output is inconclusive.

6. The apparatus according to Claim 5, wherein said ascertaining arrangement is further adapted to prompt the collection of additional input speech from the same speaker and reevaluate whether a new posited system output relating to the additional input speech is inconclusive.

7. The apparatus according to Claim 3, wherein one of said at least two statistical models relates to scores in the at least one N-best list.

8. The apparatus according to Claim 7, wherein said one of said at least two statistical models involves the calculation of a ratio of Gaussian densities relating to scores in the at least one N-best list.

9. The apparatus according to Claim 3, wherein one of said at least two statistical models relates to identities in the at least one N-best list.

10. The apparatus according to Claim 9, wherein said one of said at least two statistical models involves the estimation of the likelihood of identities in the at least one N-best list.

11. A method of facilitating speaker identification, said method comprising the

5 steps of:

accepting input speech;

generating at least one N-best list based on the input speech;

positing a system output based on the input speech; and

ascertaining, via at least one property of the N-best list, whether the posited

10 system output is inconclusive.

12. The method according to Claim 11, wherein said ascertaining step comprises ascertaining, via at least one statistical property of the at least one N-best list, whether the posited system output is inconclusive.

13. The method according to Claim 12, wherein said ascertaining step comprises

15 generating at least two statistical models of the at least one N-best list in ascertaining whether the posited system output is inconclusive.

14. The method according to Claim 13, wherein said ascertaining step comprises combining results from the at least two statistical models to yield a confidence measure in ascertaining whether the posited system output is inconclusive.

15. The method according to Claim 14, wherein said ascertaining step comprises comparing the confidence measure to a threshold value to determine whether the posited system output is inconclusive.

16. The method according to Claim 15, wherein said ascertaining step comprises prompting the collection of additional input speech from the same speaker and reevaluating whether a new posited system output relating to the additional input speech is inconclusive.

17. The method according to Claim 13, wherein one of said at least two statistical models relates to scores in the at least one N-best list.

18. The method according to Claim 17, wherein said one of said at least two statistical models involves the calculation of a ratio of Gaussian densities relating to scores in the at least one N-best list.

19. The method according to Claim 13, wherein one of said at least two statistical models relates to identities in the at least one N-best list.

20. The method according to Claim 19, wherein said one of said at least two statistical models involves the estimation of the likelihood of identities in the at least one N-best list.

21. A program storage device readable by machine, tangibly embodying a

5   program of instructions executable by the machine to perform method steps for facilitating speaker identification, said method comprising the steps of:

accepting input speech;

generating at least one N-best list based on the input speech;

positing a system output based on the input speech; and

10   ascertaining, via at least one property of the N-best list, whether the posited system output is inconclusive.